(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



! IBBH BUNDU K BUND 18 BUN BUN BUN BUN 18 K K BUN BUN BUN BUN BUN BUN BUND BUN BUND BUN BUND KUN BUND KUN BUND

(43) International Publication Date 19 May 2005 (19.05.2005)

PCT

(10) International Publication Number WO 2005/045489 A2

(51) International Patent Classification⁷:

G02B 6/00

(21) International Application Number:

PCT/US2004/021682

(22) International Filing Date:

1 July 2004 (01.07.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/484,364

2 July 2003 (02.07.2003) US

- (71) Applicant (for all designated States except US): E.I. DUPONT DE NEMOURS AND COMPANY [US/US]; 1007 MARKET STREET, WILMINGTON, Delaware 19898 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): ELDADA, Louay

[US/US]; 169 Concord Avenue, Lexington, Massachusetts 02421 (US).

- (74) Agent: SIEGELL, Barbara, C.; E. I. DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, 4417 Lancaster Pike, Wilmington, Delaware 19805 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

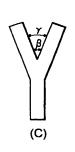
[Continued on next page]

(54) Title: Y-BRANCH-BASED THERMO-OPTIC DIGITAL OPTICAL SWITCHES AND VARIABLE OPTICAL ATTENUATORS WITH NON-UNIFORM HEATING



(57) Abstract: The present invention is concerned with 1x2 thermo-optic digital optical switches known in the art as "Y-branch digital optical switches" and variable optical attenuators.





GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.